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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,629	09/21/2005	Lawrence R. Green	75196-321978	4261

25764 7590 06/15/2009

FAEGRE & BENSON LLP  
PATENT DOCKETING - INTELLECTUAL PROPERTY  
2200 WELLS FARGO CENTER  
90 SOUTH SEVENTH STREET  
MINNEAPOLIS, MN 55402-3901

EXAMINER
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YANG, NELSON C

ART UNIT	PAPER NUMBER
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1641

NOTIFICATION DATE	DELIVERY MODE
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06/15/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

e-OfficeActionHNI@faegre.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/550,629	<b>Applicant(s)</b> GREEN, LAWRENCE R.	
	<b>Examiner</b> Nelson Yang	<b>Art Unit</b> 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-32, 34-36 and 38-44 is/are pending in the application.
- 4a) Of the above claim(s) 19-31 34-36 38 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32 and 39-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/18/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment of claim 32 and cancellation of claim 33 is acknowledged and has been entered.
2. Claims 19-32 34-36, 38-44 are pending. Claims 34-36, 38 are withdrawn.
3. Claims 32, 39-44 are under examination.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 32, 39, 40, 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuyl [US 2004/0102742] in view of MacLean et al. [US 2002/0110376].

With respect to claim 32, Tuyl teaches an optical device comprising a CCD camera, lenses for focusing images on the CCD camera, and motorized mechanisms for adjusting the focus (para. 0066). Tuyl further teaches source fluid containment structures such as microtiter plates (para. 0035) and moveable stage for positioning the source fluid containment structures (para. 0036), and a cooling unit (para. 0188). Tuyl fails to teach creating an average interpolation function for producing interpolated signal values for the pixel.

MacLean et al., however, teach a method and apparatus for calibrating a sensor for highlights and for processing highlights in an image (abstract) involving the use of multi-

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dimensional multi-linear and multi-cubic interpolation functions for different pixel values, which is performed on a pixel by pixel basis (para 0114-0119). MacLean et al. further teach that this system can be used to impose and improve the dynamic range of an electronic image and to provide stable, reproducible and accurate data so that color and texture can be accurately and consistently represented (para. 0050-0051).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used an interpolation function on pixels in the calibration image of Tuyl, as suggested by MacLean et al. in order to impose and improve the dynamic range of an electronic image and to provide stable, reproducible and accurate data so that color and texture can be accurately and consistently represented.

6. With respect to claims 39, 42, Tuyl teaches a CCD camera (para. 0066).
7. With respect to claim 40, Tuyl teaches that the well plates may be transparent or translucent (para. 0138).
8. With respect to claim 43, Tuyl teaches that the cooling unit may comprise a Peltier junction (para. 0188).
9. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuyl [US 2004/0102742] in view of MacLean et al. [US 2002/0110376], as applied to claim 32 above, and further in view of Bloomfield et al. [US 4,501,495]

With respect to claim 41, Tuyl teaches that the stage may comprise a handling device used to hold and align well plates in a precise manner (para. 0055), but fail to teach that the stage comprises a depression for aligning a slide or microtiter well plate that fits into the depression.

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Bloomfield et al., however, teach stages having a rectangular depression for mounting slides (fig.1), and further teach that the stages are durable, reliable, and easy to service, while providing good optical alignment (column 1, lines 25-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used one of the stages of Bloomfield et al. comprising a rectangular depression for mounting and alignment of slides in the device of Tuyl, particular since the stages are durable, reliable, and easy to service, while providing good optical alignment.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 32, 39-43 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. No claims are allowed.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571)272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Shibuya can be reached on (571)272-0806. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nelson Yang/

Primary Examiner, Art Unit 1641